

Work Order ID 70028



Page 1

Wednesday, May 25, 2011 1:01:55 PM

Item ID:	D3943-3	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Handle Extension					
Start Date:	5/25/2011	Start Qty:	8.00		Cust Item ID:	
Required Date:	6/10/2011	Req'd Qty:	8.00		Customer:	
Reference:						

Approvals:	Process Plan:	<u>CZ</u>	Date:	<u>11/05/25</u>	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
D3943	C								

100		0.00							
Waterjet									

FLOW CNC Waterjet									
1010 1/2 x 3"									
	Memo								
	1-Cut as per Dwg D3943								
	Dwg Rev: <u>E</u>								
	Prog Rev: <u>E</u>								
	2-Deburr if necessary								

110		0.00							
QC									

Quality Control									
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max not pulled

B11-5-30

8

B11-5-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 70028

Wednesday, May 25, 2011 1:01:55 PM

Page 2

Item ID: D3943-3

Accept

Revision ID:

Item Name: Handle Extension

Start Date: 5/25/2011 Start Qty: 8.00

Required Date: 6/10/2011 Req'd Qty: 8.00

Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00

11/05/30 8

QC

Memo

0.00

Quality Control

130

0.00

B.A 11/06/01

8

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

MILL AS PER DWG AND FOLIO FA915
FOLIO REV: AA
DWG REV: D

2-MILL DIMPLE USING 3/8" BALL MANUALLY

11/05/30 8

140

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

S 11/06/01

(x8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 70028



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Wednesday, May 25, 2011 1:01:55 PM

Item ID: D3943-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Handle Extension

Start Date: 5/25/2011 Start Qty: 8.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

150

Hybrid safety Yellow 4.3.5.12

0.00



Powdercoat

Memo

0.00

Powder Coating

Start Time: 10:10

Oven Temperature: 400 OF

Finish Time: 10:40

8x 11/06/02

160

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

8 11-6-2

170

Identify as per dwg & Stock Location 95

0.00



Packaging

Memo

0.00

Packaging

11/6/25 (80)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, May 25, 2011 1:01:52 PM

Page 1

Work Order ID: 70028

Parent Item: D3943-3

Parent Item Name: Handle Extension



Start Date: 5/25/2011

Required Date: 6/10/2011

Start Qty: 8.00

Required Qty: 8.00

Comments: Est Rev:A New Issue 09-06-03 JLM Verified By:EC IPP Rev:B as per
dwg REV.C DD 10.02.22 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M1010B0.500X03.000

Purchased

No

100

f

0.0000

1.26

10.08



11741

B11-5-30

1010-1025 BAR.500"x3.00"

M1010B0.500X03.000

CL11/05/27

M1010B1.000X00.500

(8)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	70028
Description: Handle Extension		Part Number:	D3943-3
Inspection Dwg: D3943	Rev: AD	Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.87	+/-0.030	.878	✓		V BGL	
0.40	+/-0.030	.399	✓		V	
0.13	+/-0.030	.126	✓		V	
Ø0.30	+0.006/-0.001	.301	✓		V	
1.63	+/-0.030	1.645	✓		V	
0.50	+/-0.030	.514	✓		V	
0.56	+/-0.030	.56	✓		V	
2.75	+/-0.030	2.753	✓		V	
4.25	+/-0.030	4.255	✓		V	
6.06	+/-0.030	6.063	✓		V	
13.38	+/-0.030	13.380	✓		T B21	
14.50	+/-0.030	14.50	✓		T	
0.500	+/-0.010	.492	✓		V	
.31	±.050	.314	✓		RA26	Vern
.81	±.030	.812	✓		"	"
.06	±.030	.062	✓		"	"
Ø 0.38	+/- .030	0.370	✓		Vern	GA-01
0.25	+/- .030	0.244	✓		"	"
0.40	+/- .030	0.398	✓		"	"

Measured by: AB	Audited by: [Signature]	Prototype Approval:	N/A
Date: 11-5-30	Date: 11/05/30	Date:	N/A
Rev	Date	Change	Revised by
A	09.06.11	New Issue	KJ [Signature]
			Approved
			[Signature]

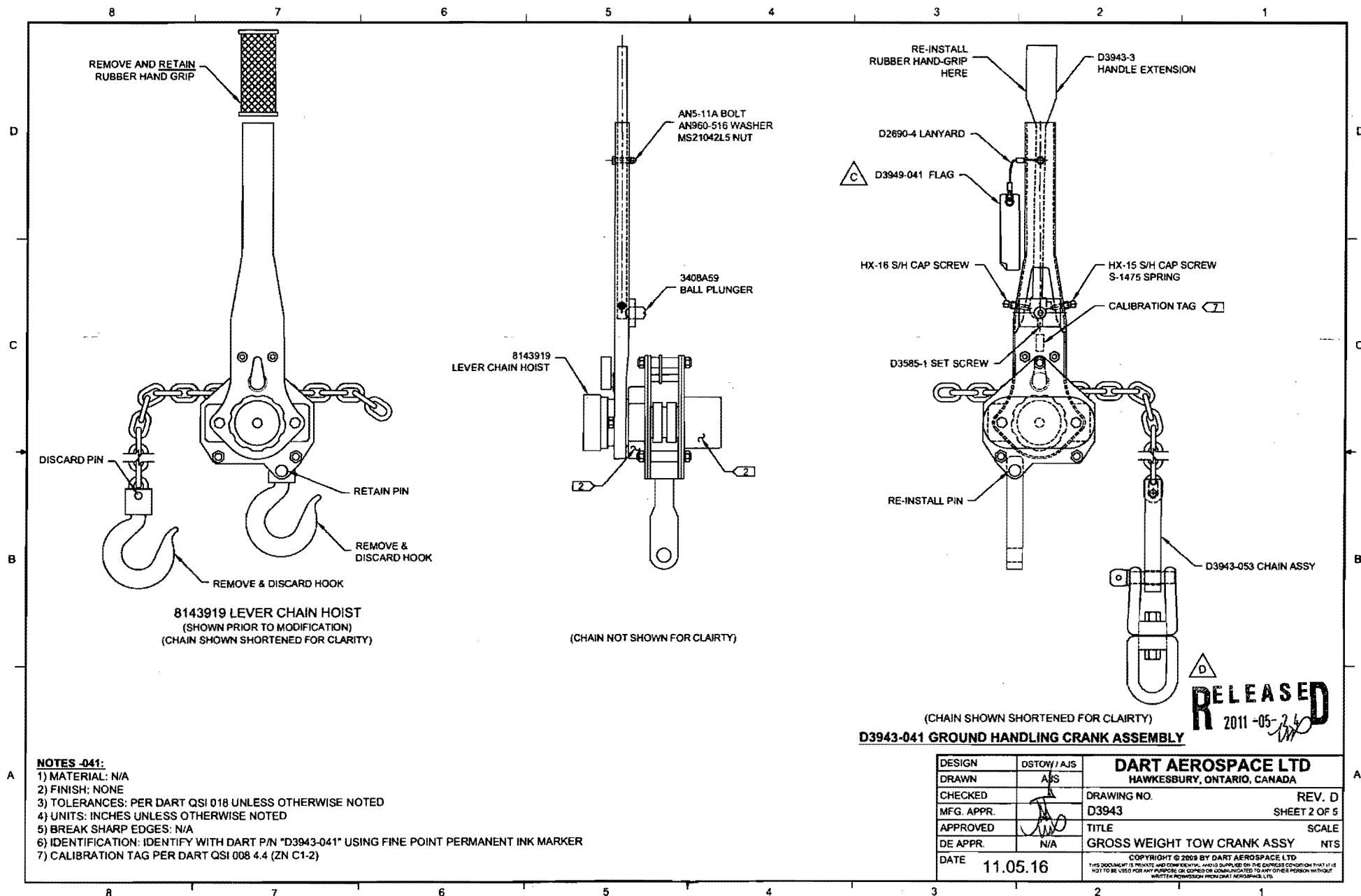


ITEM No.	QTY -041	QTY -051	QTY -053	PART NUMBER	DESCRIPTION	PREFERRED SUPPLIER
1	X			D3943-041	GROUND HANDLING CRANK ASSEMBLY	
5	1	X		D3943-051	HANDLE ASSEMBLY	
6	1		X	D3943-053	CHAIN ASSEMBLY	
11		1		D3943-1	HANDLE	M/F HANDLE FROM DIS-ASSEMBLED ITEM 39
12	1			D3943-3	HANDLE EXTENSION	
13		1		D3943-5	PLATE	
14		2		D3943-7	STUD	
15			1	D3943-9	CHAIN	USE CHAIN SUPPLIED WITH ITEM 39
16			1	D4405-1	EYE AND FORK SWIVEL	
21	1			D2690-4	LANYARD	
22	1			D3585-1	SET SCREW	
23	1			D3949-041	REMOVE BEFORE FLIGHT FLAG	
24			1	D3954-5	CHAIN LUG	
25	1			D3954-7	RATCHET LUG	
26			1	D3954-9	GWT CHAIN PIN	
31	1			AN5-11A	BOLT	
32	1			AN960-516	WASHER	
33	1			MS21042L5	NUT	
39	1			8143919	LEVER CHAIN HOIST (POWER FIST)	PRINCESS AUTO / 4000 lbs CAPACITY
51	1			S-1475	SPRING	REID SUPPLY
52	1			3408A59	BALL PLUNGER	McMASTER CARR
53	1			HX-15	SOCKET HEAD CAP SCREW 1/2-20 UNC X 0.75 LG	HASKINS
54	1			HX-16	SOCKET HEAD CAP SCREW 1/2-20 UNC X 1.0 LG	HASKINS

C211/05/25
WID: 70028

RELEASED
2011-05-24
WAP

D	SHT 1 PL. ITEMS 51-54 RENUMBERED SEE PREV. REV. FOR DETAILS. ITEM 16 ADDED (VIEWS UPDATED). SHT 2 ZN D3 FLAG RELOCATED. SHT 3 ZONE D3, Ø0.12 HOLE DELETED. (SEE NCR 11-495)	AJS	11.05.16
C	RMV FINISH -041 (ZN A8-2), ADD NEW FINISH -051/-053/-1/-3 (A8-3/-4/-5), ADD CALIBRATION (A8-2), (1) HX-16 WAS HX-15 (B3-1, C3-1), PAR 10-001	CP	10.01.26
B	SHT 1 PL. ITEM 31 WAS AN4-10A, ITEM 32 WAS AN960-416, ITEM 33 WAS MS21042-4, ITEM 43 WAS 0.75 LG. SHEETS 2 - 5 NOTES: FINISH FOR ALL COMPONENTS NOW YELLOW SPRAY PAINT.	AJS	09.10.15
A	NEW ISSUE	AJS	09.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	DSTOW / AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. D
CHECKED		D3943	SHEET 1 OF 5
MFG. APPR.		TITLE	SCALE
APPROVED		GROSS WEIGHT TOW CRANK ASSY	NTS
DE APPR.		COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	11.05.16		



D3943-1 HANDLE

2 PL

9.75

2.00

Ø0.31
THRU

D3943-7 STUD
2 PL

THREAD $\frac{1}{4}$ -20 UNC-2B
2 PL

THREAD $\frac{1}{4}$ -20 UNC-2B
THRU

VIEW A-A
A5-3
(SCALE 2X) B5-3

2 PL

9.38

A B1-3

A B1-3

D3943-5 PLATE

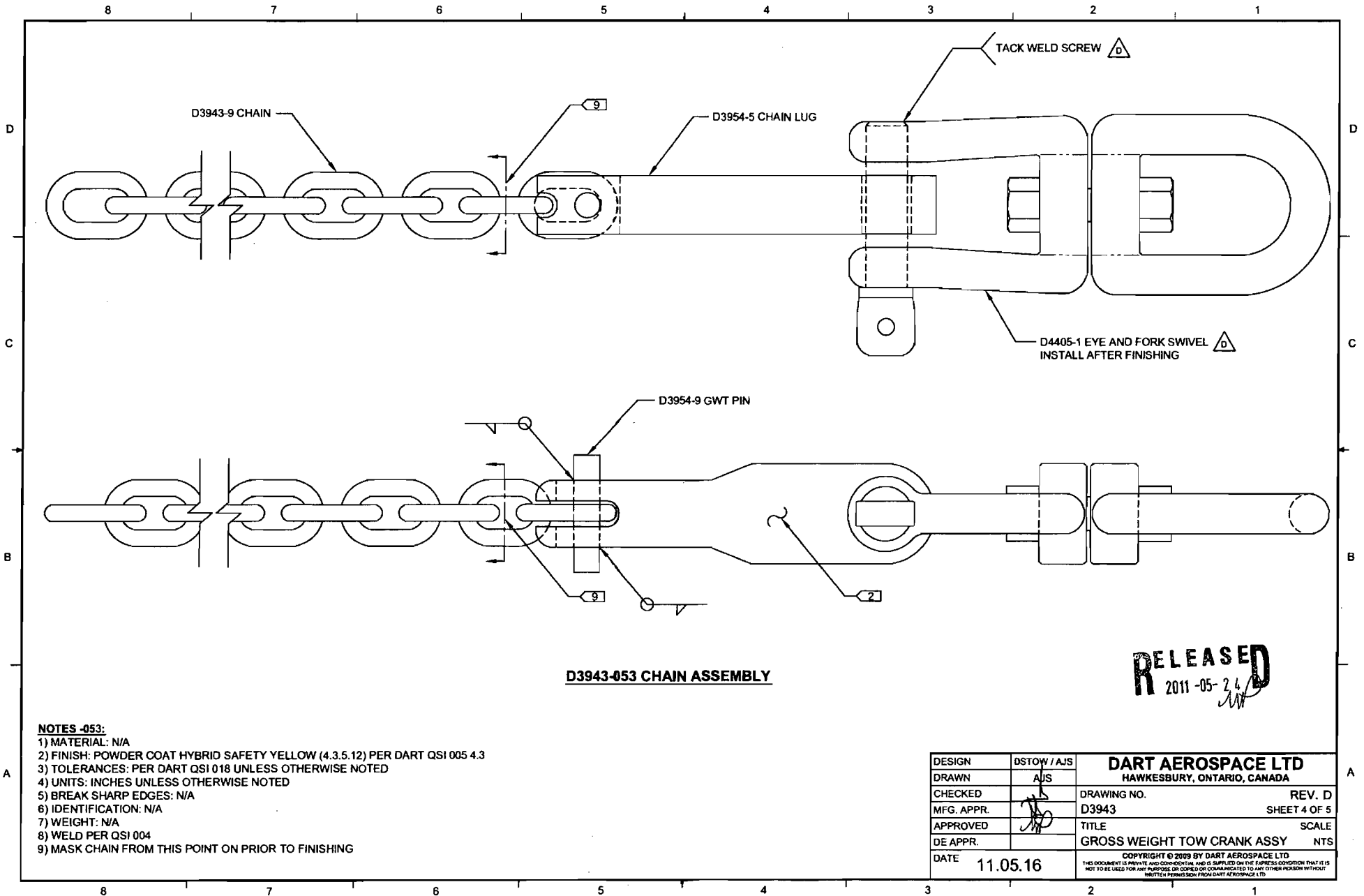
D3943-051 HANDLE ASSEMBLY

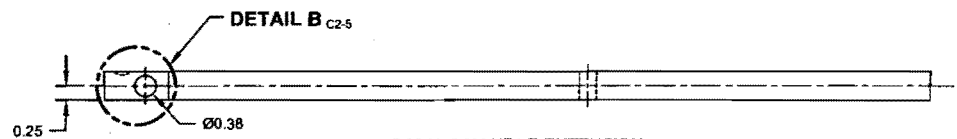
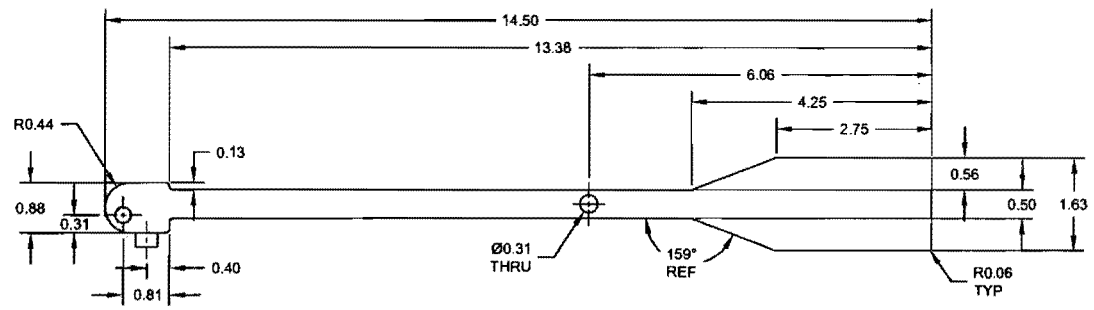
NOTES -051:

- 1) MATERIAL : N/A
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: X.XX DIMENSIONS +/- 0.06 ALL OTHERS
PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) MASK ALL THREADS PRIOR TO FINISHING

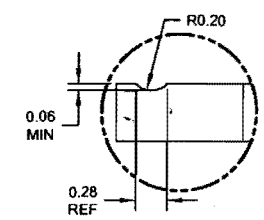
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2011-05-24

DESIGN	DSTQW / AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3943	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		GROSS WEIGHT TOW CRANK ASSY	NTS
DATE	11.05.16	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

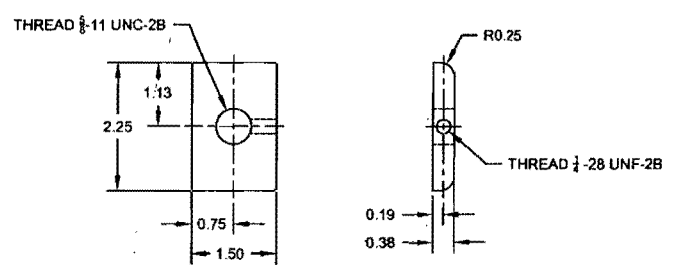




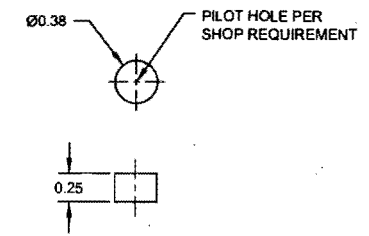
D3943-3 HANDLE EXTENSION



DETAIL B-B
(SIMPLE DETAIL)
(SCALE 2X)



D3943-5 PLATE



D3943-7 STUD
(SCALE 2X)

NOTES -11/-13:

- 1) MATERIAL -3 & -5: MILD STEEL, SHEET
AISI 1010-1025 OR ASTM A36/A366/A1008
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-S
- OR: MILD STEEL, BAR
AISI 1010-1025 OR ASTM A36/A366/A569/A570
OR CSA G40-21, 38W/44W/50W/60W/70W
REF DART SPEC M1010-B
- 7: MILD STEEL, ROUND BAR
AISI 1018-1025
PER MIL-S-7097
REF DART SPEC M1018-R
- 2) FINISH: POWDER COAT HYBRID SAFETY YELLOW (4.3.5.12) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A

DESIGN	DSTOW / AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3943	SHEET 5 OF 5
APPROVED		TITLE	SCALE
DE APPR.		GROSS WEIGHT TOW CRANK ASSY	NTS
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2011-05-24

